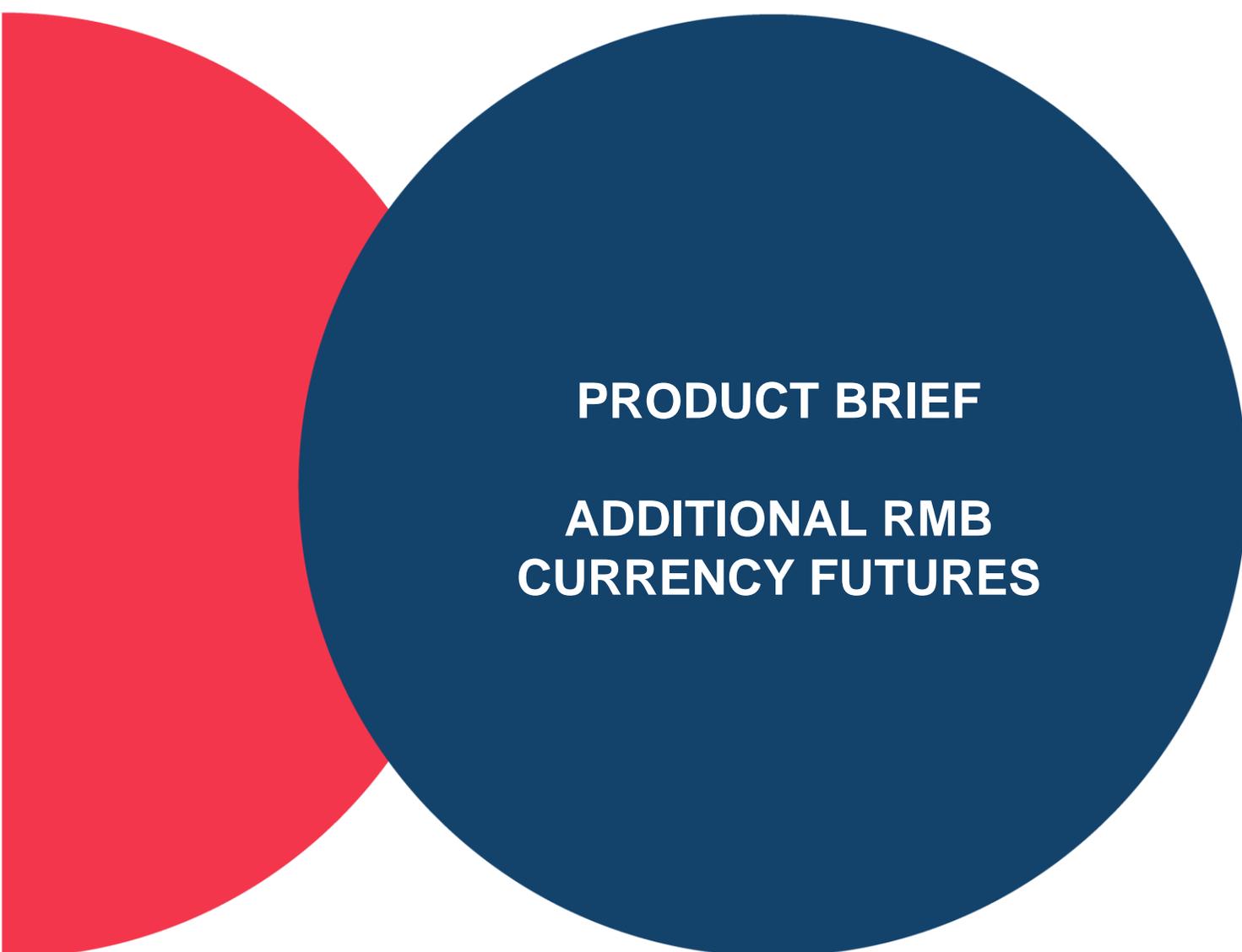


May 2016



PRODUCT BRIEF

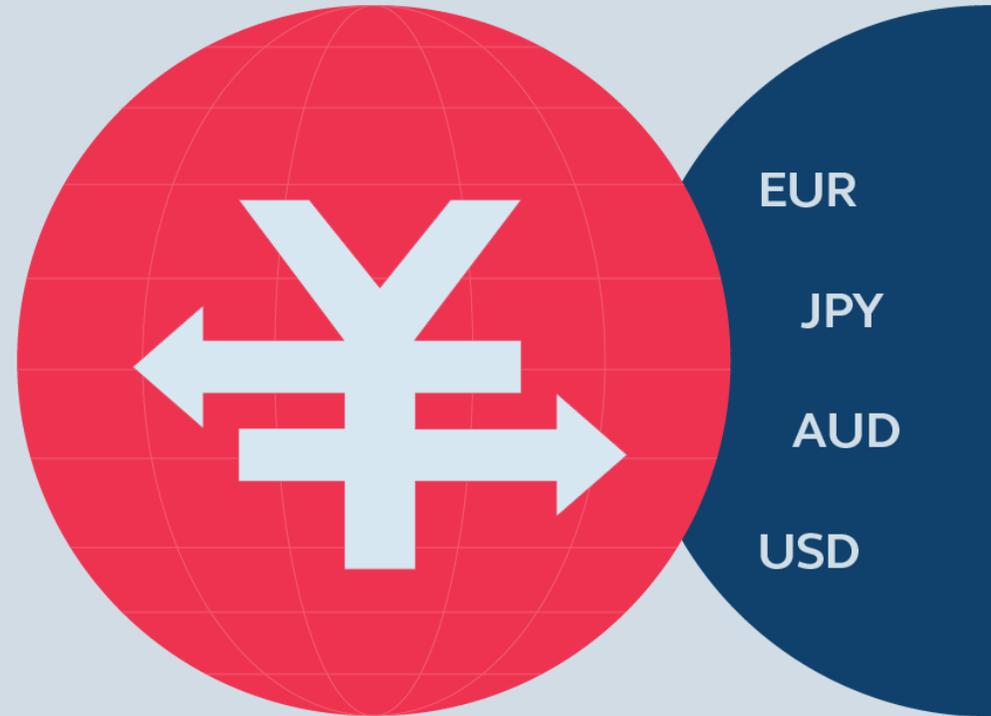
**ADDITIONAL RMB
CURRENCY FUTURES**

HKEX
香港交易所

FIC Product Development
Market Development Division

RMB CURRENCY FUTURES

Your Premier RMB
Risk Management Tools
against a Basket of Currencies



AGENDA

1

HKEX Value Propositions in FIC

2

New Cash-Settled Currency Futures

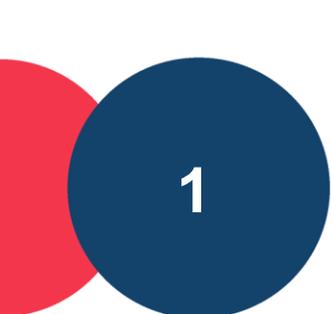
3

Operational Arrangements

4

Hedging and Trading Applications

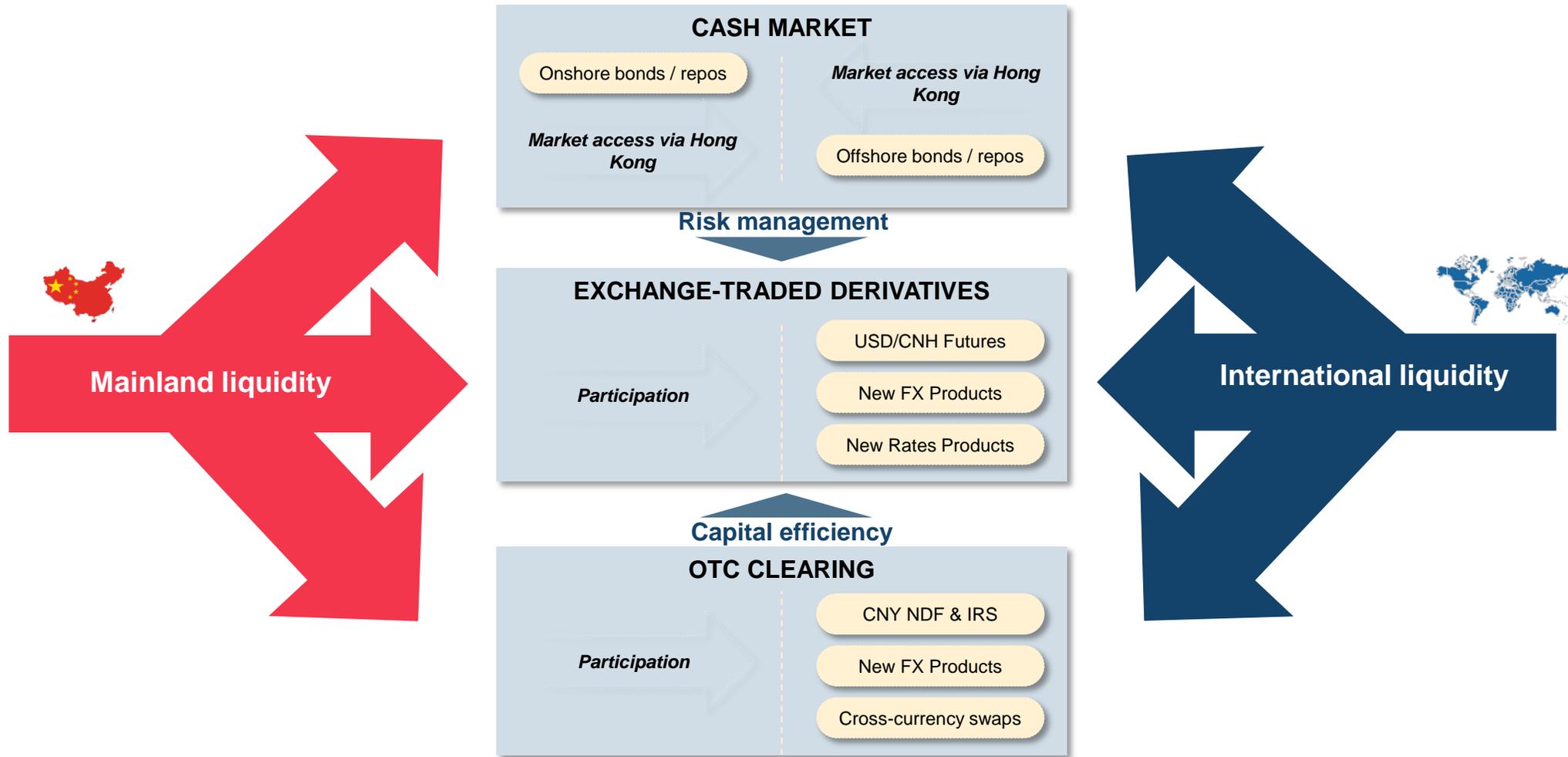




1

HKEX VALUE PROPOSITIONS IN FIXED INCOME AND CURRENCY

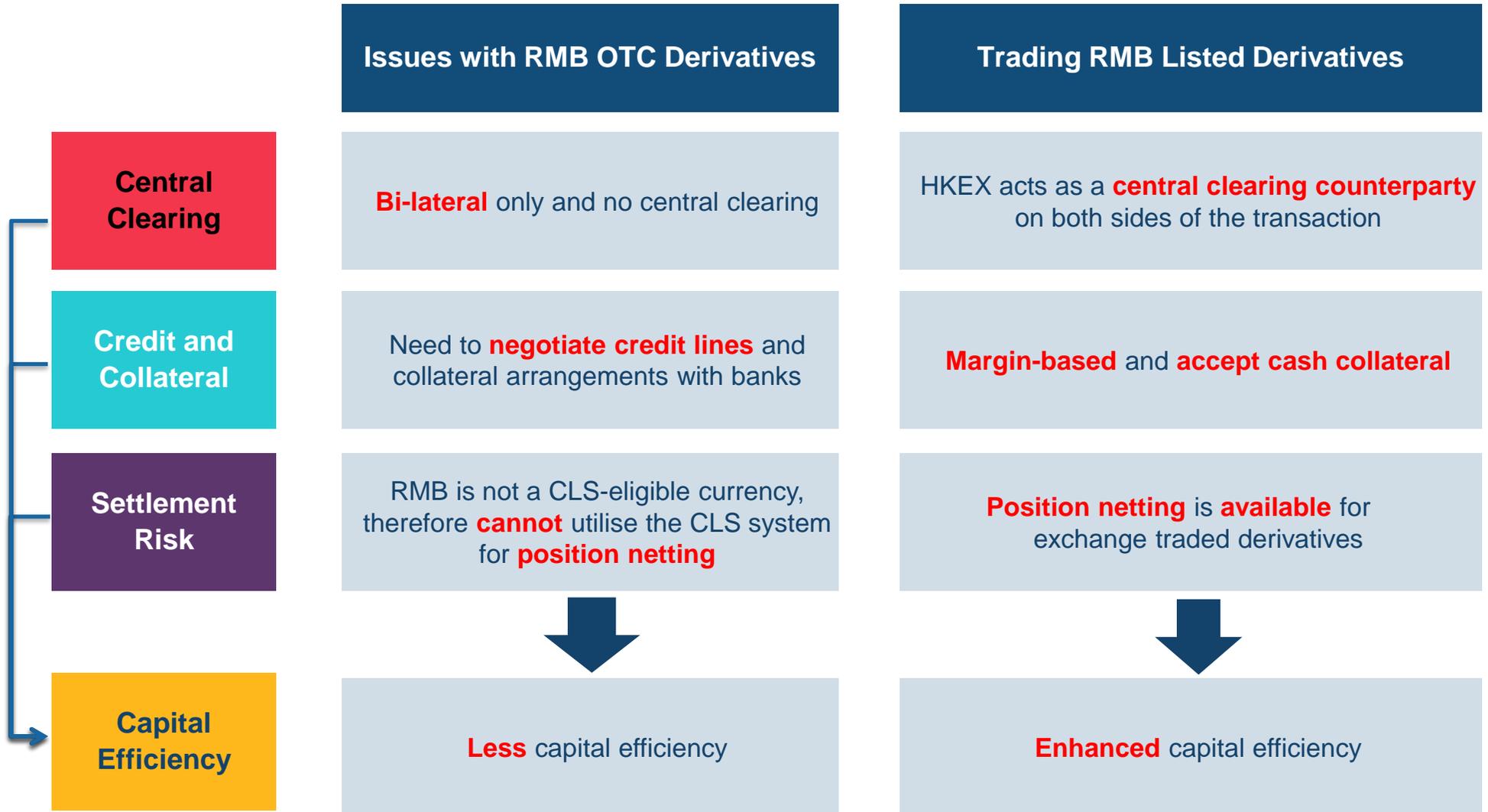
RECAP – HKEX STRATEGIES IN FIC



Onshore Access with Full Suite of FIC Derivatives on China Underlying



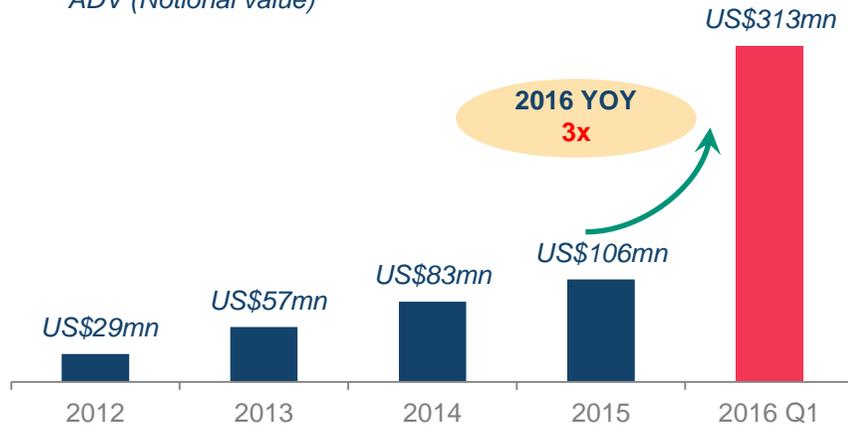
ROLES OF LISTED RMB PRODUCTS



BUILDING OUT AN END-USER DRIVEN RMB FUTURES MARKET

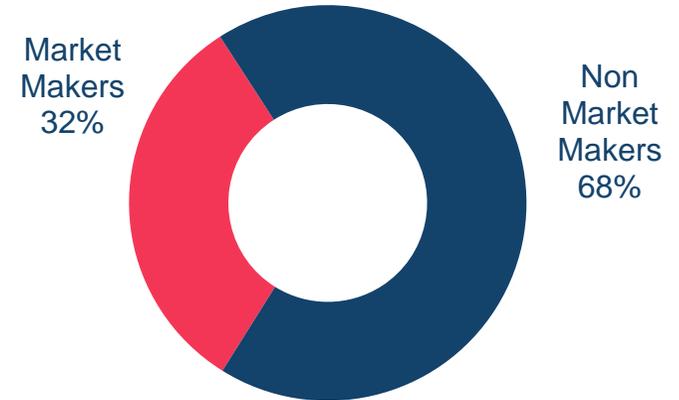
USD/CNH Futures: World's Most Liquid

ADV (Notional value)



Source: HKEX

Market Player Breakdown



Source: HKEX, 2015

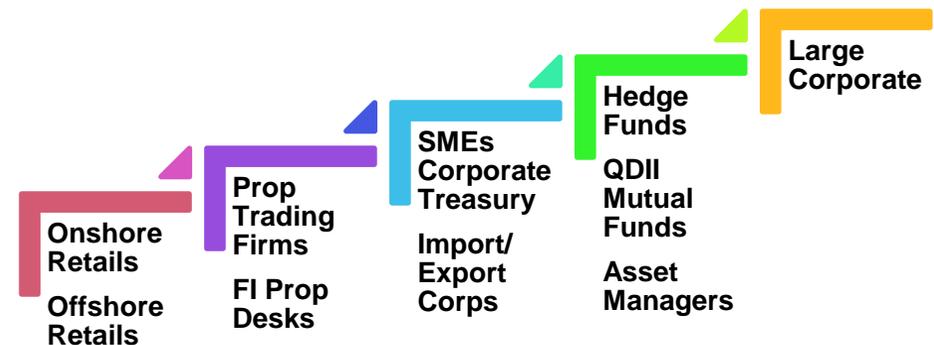
2016 Records

Turnover of US\$771mn on 11 Feb, 2nd All-Time High

Open Interest record of US\$3.2bn on 5 Feb

3 Straight Months of Record ADV – Dec15, Jan16 & Feb16

AHFT All-Time Record (US\$131mn) on 11 Feb



2

**NEW CASH-SETTLED
RMB CURRENCY FUTURES
(LAUNCH ON 30 MAY 2016)**

PBOC's NEW FX REGIME – WITH REFERENCE TO A BASKET OF CURRENCIES

Moving Away From Bilaterally Fixating To USD/CNY

New Managed Float Framework across a Basket of Currencies

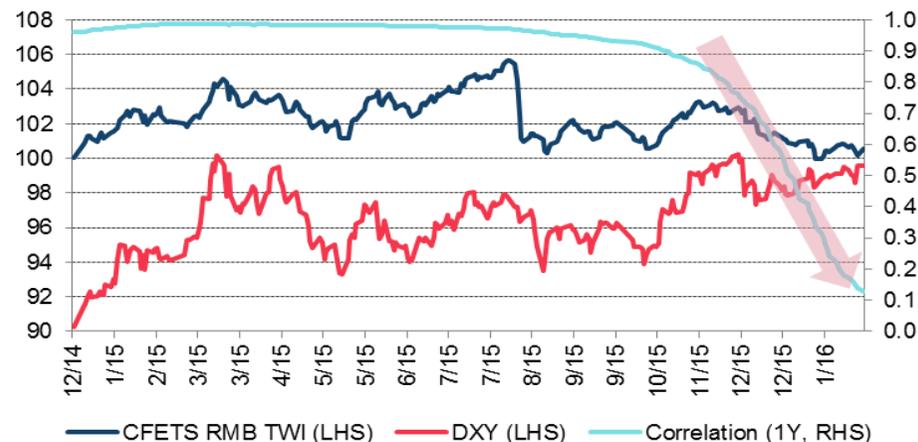
- On 11 Dec 2015, PBOC introduced a RMB trade-weighted index (TWI), published by CFETS & covers 13 currencies
- Consistent with PBOC's managed floating FX framework based on market supply and demand factors with reference to a basket of currencies

Divergence from USD Movement

- CFETS RMB TWI and US dollar index (DXY) started to diverge in August 2015, with annualised correlation down to less than 20% lately
- Such decoupling is in line with the PBOC's intention to de-link the CNY TWI from movements in the USD

CNY Against	Weighting
1 USD	26.4%
2 EUR	21.4%
3 JPY	14.7%
4 HKD	6.6%
5 AUD	6.3%
6 MYR	4.7%
7 RUB	4.4%
8 GBP	3.9%
9 SGD	3.8%
10 THB	3.3%
11 CAD	2.5%
12 CHF	1.5%
13 NZD	0.7%

CFETS RMB TWI vs DXY



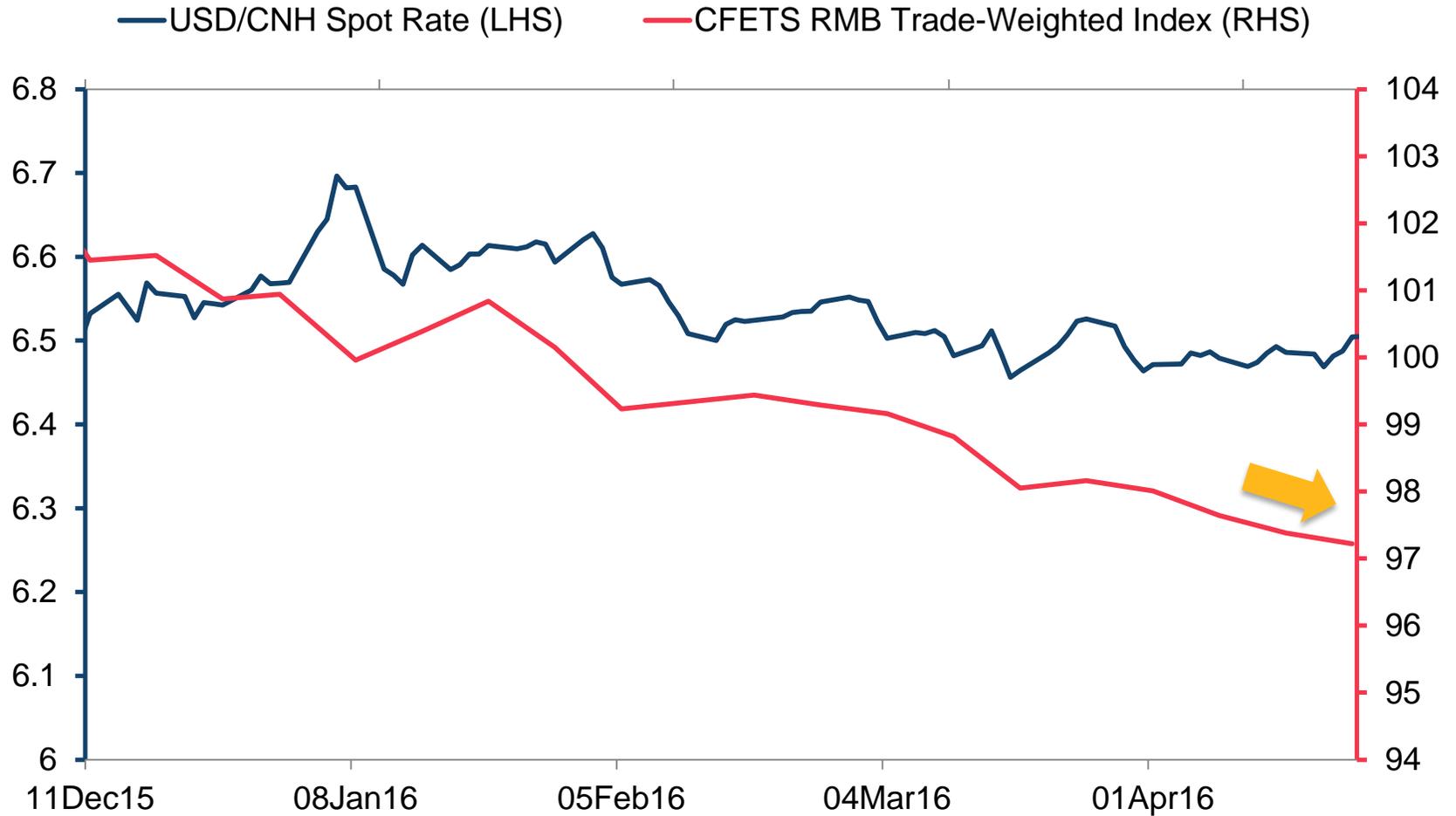
Source: CFETS, as of December 2015

Source: CFETS, Bloomberg



CASE IN POINT

Although recently stabilising against USD, RMB actually weakened against a basket of currencies



Source: Bloomberg



CONTRACT DESIGN

	(1) EUR/CNH Futures	(2) JPY/CNH Futures	(3) AUD/CNH Futures	(4) CNH/USD Futures
Contract Size	EUR50K	JPY6,000K	AUD80K	RMB300K
Price Quotation	RMB per EUR (e.g. 6.8028)	RMB per 100 JPY (e.g. 5.5923)	RMB per AUD (e.g. 4.6942)	USD per 10 RMB (e.g. 1.5288)
Tick Value	RMB5	RMB6	RMB8	USD3
Settlement Methodology	Cash settled in RMB			Cash settled in USD
Contract Months	4 contract months (Spot, next and first two quarter months)			8 contract months
Reference Benchmark	A cross rate calculated from WM/Reuters Intraday Spot Rates and TMA CNH Fixing at 11:00am			TMA Fixing
Minimum Fluctuation	RMB 0.0001 (4 decimal places)			USD 0.0001
Trading Hours	9:00am to 4:15pm (T session) and 5:00pm to 11:45pm (T+1 session)			
Last Trading Day	Two Hong Kong Business Days prior to the third (3rd) Wednesday of the Contract Month			



EMERGENCE OF NEW RMB CROSSES

EUR/CNH

- ✓ EU largest trade partner to China; China 2nd largest trade partner to EU
- ✓ Divergence between fiscal / monetary policy of US & Europe
- ✓ Risk management against European Central Bank policies

JPY/CNH

- ✓ World's 3rd most traded currency
- ✓ Pair trading on precious metals
- ✓ Risk management against Bank of Japan policies

AUD/CNH

- ✓ Australia emerged as one of China's largest trade partners in commodities
- ✓ AUD offers diversification benefits through its strong link with commodity prices
- ✓ Risk management against Reserve Bank of Australia policies

CNH/USD (i.e. inverse style)

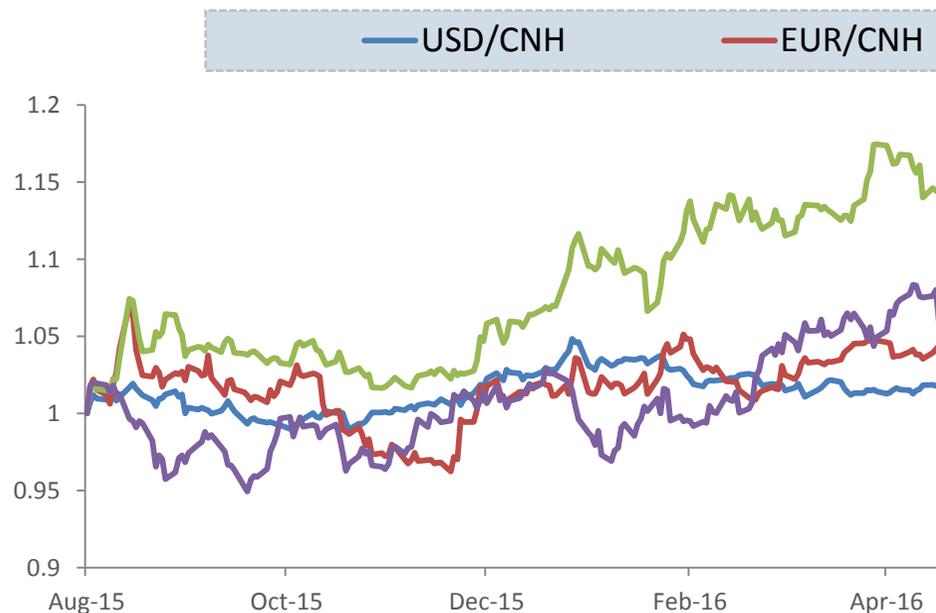
- ✓ Margining & settlement in USD
- ✓ Cash settlement reduces operational burden
- ✓ Smaller notional for retail participation
- ✓ Trading opportunities with existing USD/CNH futures



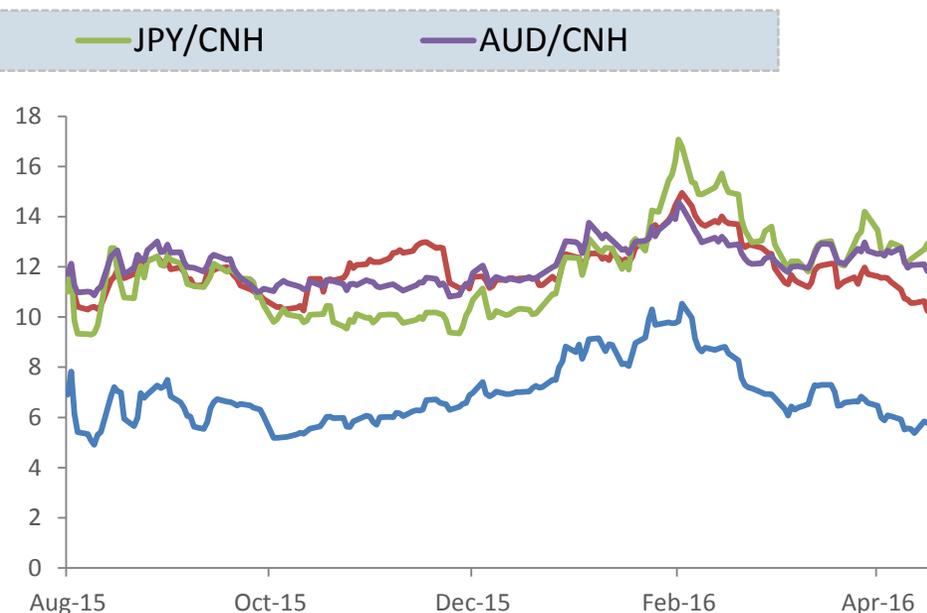
OPPORTUNITIES UNDER “ASYNCHRONOUS” MONETARY POLICY AMONG CENTRAL BANKS

- The IMF highlighted the “asynchronous” monetary policies of central banks as a major risk to the global economy
- While the US is on a tightening cycle, Europe, Japan and Australia are easing monetary conditions at different pace
- Risk management needs driven by higher movements and volatility of RMB against EUR, JPY and AUD

FX Movement (Rebased on 11 August 2015)



FX Volatility (3M Implied, %)



MARKET DYNAMICS: USD/CNH

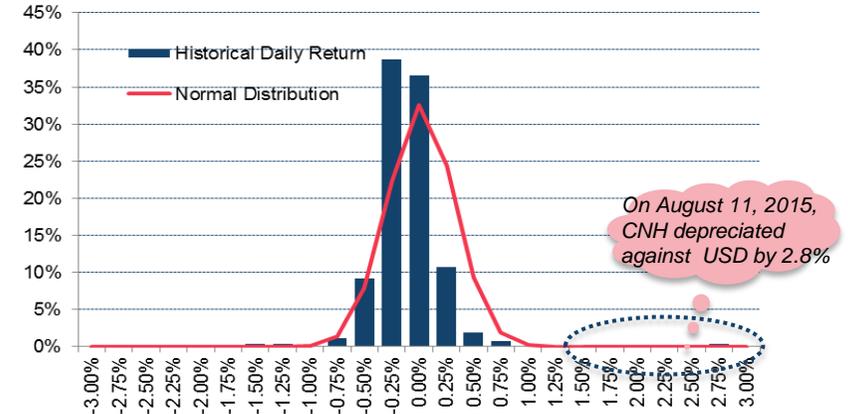
RMB's decoupling from USD has pushed up USD/CNH volatility to a level never seen before
 The USD has depreciated against CNH by 1.7% in Q1 2016

Near-term FX levels mostly driven by relative interest rates

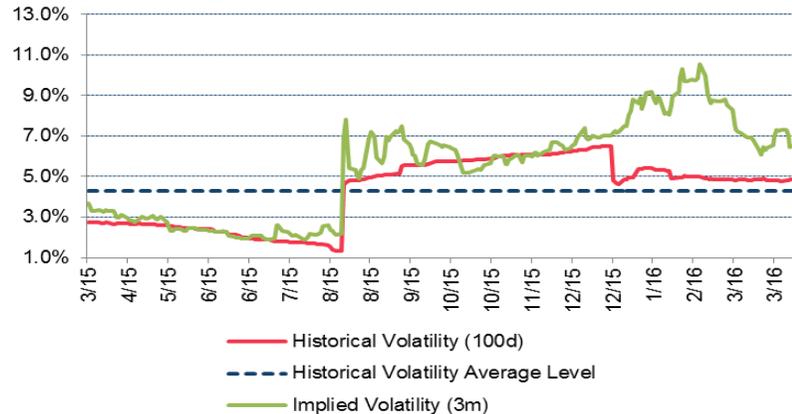
RMB per USD



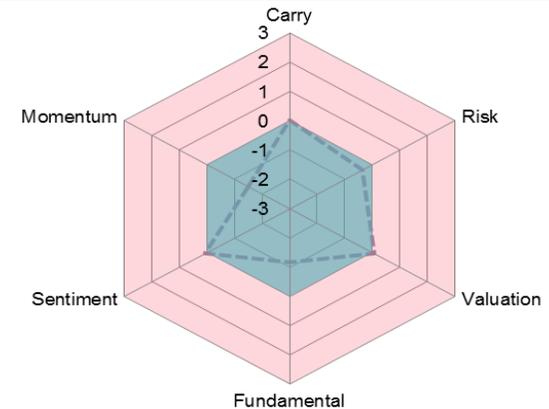
Left tail events of FX can have devastating effects on RMB-related investment performance



The FX volatility has increased recently and reminded us of the need for sound risk management



Key Driving Factors*



Source: Bloomberg, March 2016

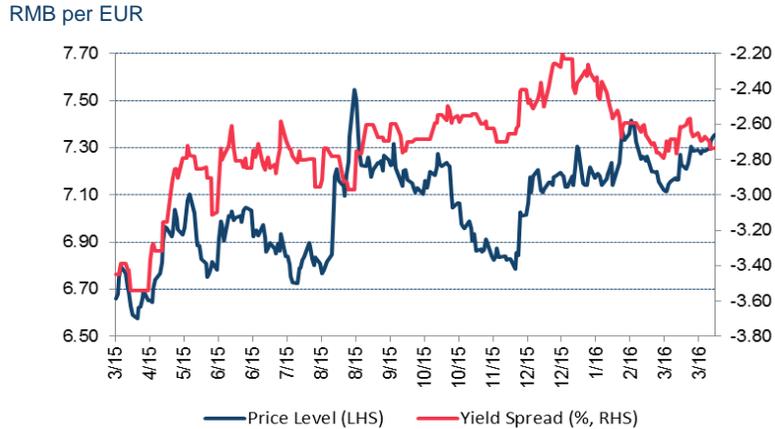
*DEFINING THE FX RADAR: We selected a number of factors that drive RMB currency pairs, including carry (yield spread), risk (volatility), valuation (terms of trade), fundamentals (trade balance), sentiment (risk reversal), and momentum (three-month return). Factor values were normalized based on the most recent one-year data and plotted on our FX radar graph. For example, a factor value of 1 for "carry" indicates that the current yield spread is one standard deviation above its mean over the past year. The red dotted line represents the prevailing factor dynamics of the specific RMB FX pair



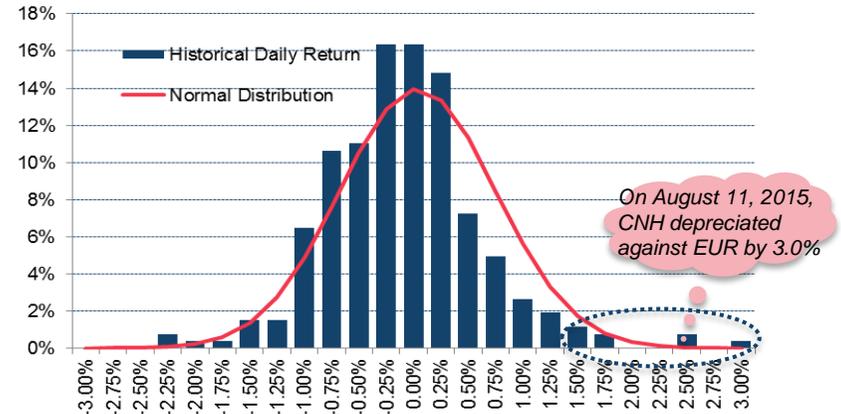
MARKET DYNAMICS: EUR/CNH

European Central Bank's negative rates policy pushed up EUR/CNH volatility to a level last seen in 2011. The EUR has appreciated against CNH by 2.4% in Q1 2016

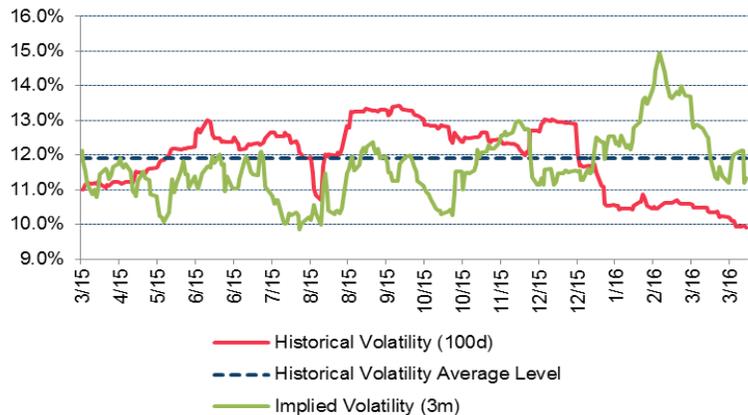
Near-term FX levels mostly driven by relative interest rates



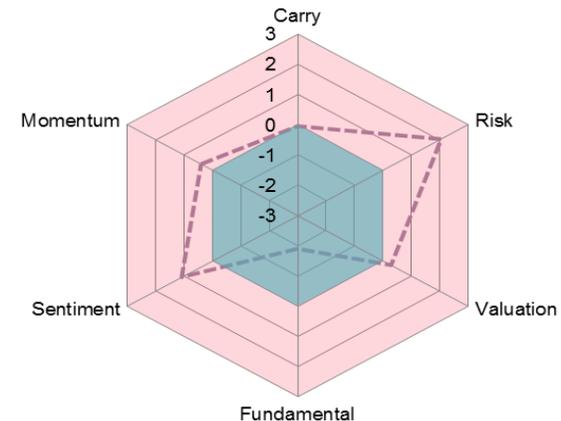
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Key Driving Factors*



Source: Bloomberg, March 2016

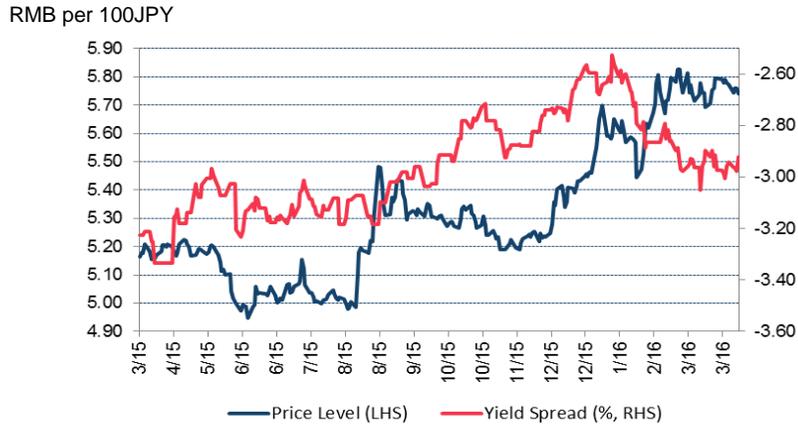
*DEFINING THE FX RADAR: We selected a number of factors that drive RMB currency pairs, including carry (yield spread), risk (volatility), valuation (terms of trade), fundamentals (trade balance), sentiment (risk reversal), and momentum (three-month return). Factor values were normalized based on the most recent one-year data and plotted on our FX radar graph. For example, a factor value of 1 for "carry" indicates that the current yield spread is one standard deviation above its mean over the past year. The red dotted line represents the prevailing factor dynamics of the specific RMB FX pair



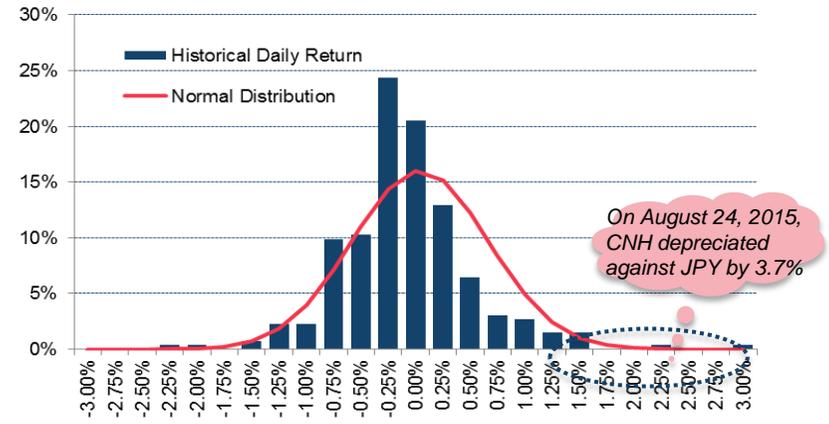
MARKET DYNAMICS: JPY/CNH

Despite the Bank of Japan QE and negative rates policies, the JPY has appreciated against CNH by 5.2% in Q1 2016

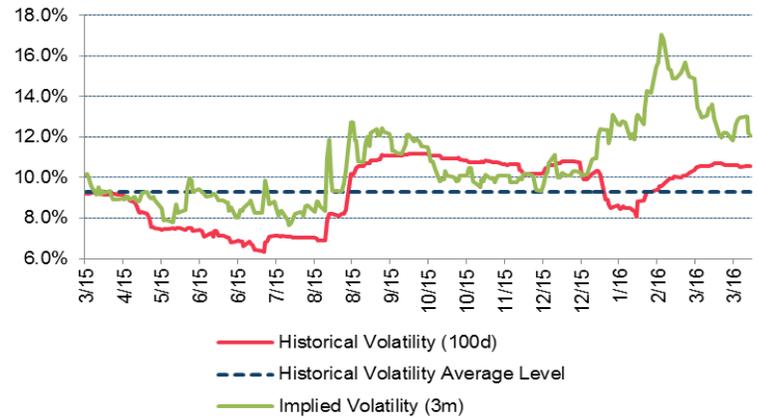
Near-term FX levels mostly driven by relative interest rates



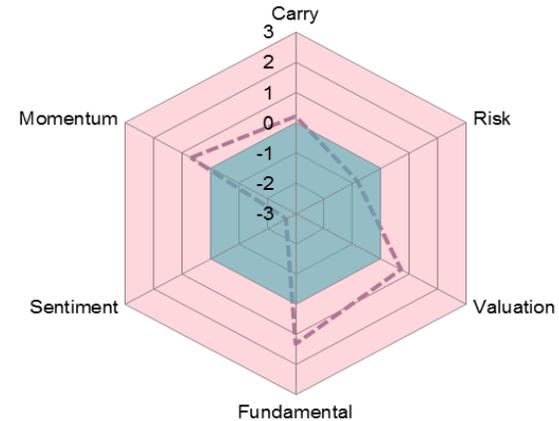
Left tail events of FX can have devastating effects on RMB-related investment performance



The FX volatility has increased recently and reminded us of the need for sound risk management



Key Driving Factors*



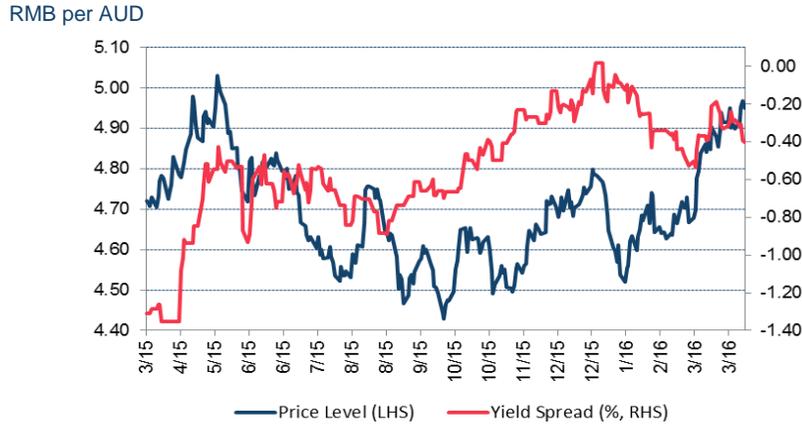
Source: Bloomberg, March 2016
 *DEFINING THE FX RADAR: We selected a number of factors that drive RMB currency pairs, including carry (yield spread), risk (volatility), valuation (terms of trade), fundamentals (trade balance), sentiment (risk reversal), and momentum (three-month return). Factor values were normalized based on the most recent one-year data and plotted on our FX radar graph. For example, a factor value of 1 for "carry" indicates that the current yield spread is one standard deviation above its mean over the past year. The red dotted line represents the prevailing factor dynamics of the specific RMB FX pair



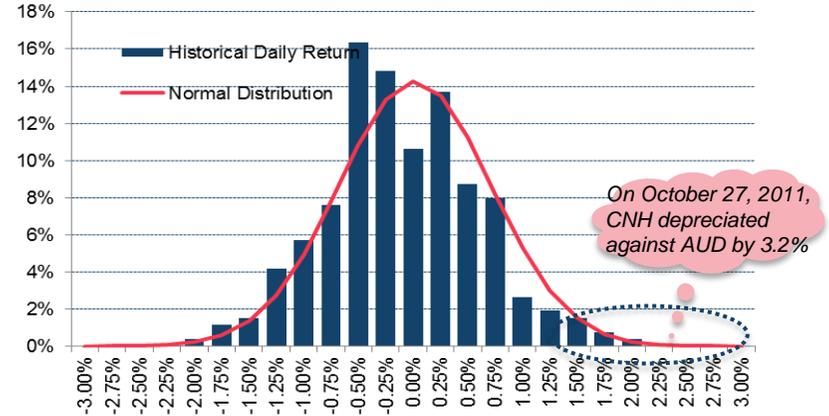
MARKET DYNAMICS: AUD/CNH

Although the loose monetary policy by Reserve Bank of Australia has pushed for a weaker currency, AUD has appreciated against the CNH by 3.1% in Q1 this year

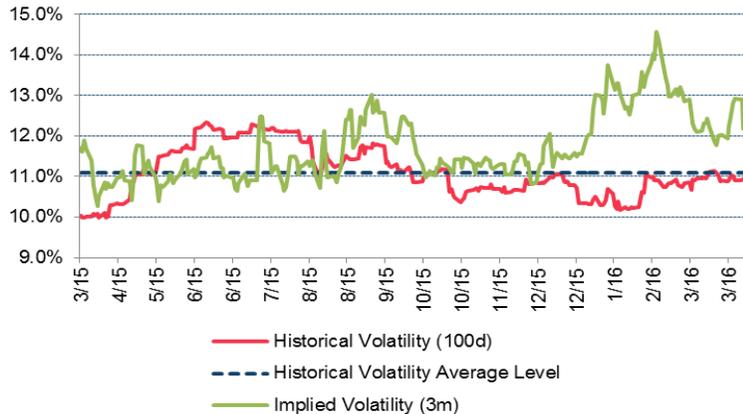
Near-term FX levels mostly driven by relative interest rates



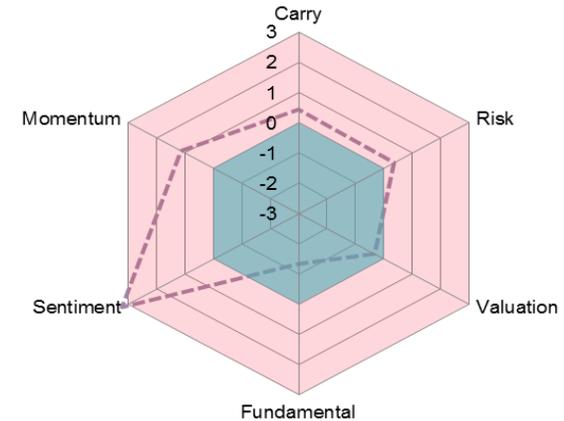
Left tail events of FX can have devastating effects on RMB-related investment performance



The FX volatility has increased recently and reminded us of the need for sound risk management



Key Driving Factors*



Source: Bloomberg, March 2016

*DEFINING THE FX RADAR: We selected a number of factors that drive RMB currency pairs, including carry (yield spread), risk (volatility), valuation (terms of trade), fundamentals (trade balance), sentiment (risk reversal), and momentum (three-month return). Factor values were normalized based on the most recent one-year data and plotted on our FX radar graph. For example, a factor value of 1 for "carry" indicates that the current yield spread is one standard deviation above its mean over the past year. The red dotted line represents the prevailing factor dynamics of the specific RMB FX pair



NEW CONTRACT FEATURES

Cost Saving

- **No Levy for All Currency Futures**
- **No Exchange Fee for the First 6 Months**

Price Transparency

- **Real-time prices available on HKEX website and other popular information vendors**

Leverage

- **Margin basis; Around 2-3% of notional amount**

Block Trade

- **Liquidity Providers to Facilitate Large Size Quotation (Min. Size: c.US\$2.5million)**
- **No Bilateral Credit Line Required**



COMPARISON BETWEEN USD/CNH FUTURES AND PROPOSED NEW PAIRS

1

2

3

4

Product	USD/CNH Currency Futures	New RMB Pairs
Underlying	USD/CNH	EUR/CNH JPY/CNH AUD/CNH CNH/USD
Contract Size	US\$100,000	Half – Around US\$50,000
Settlement Method	Physically-settled (USD vs. RMB)	Cash-settled
Last Trading Day (LTD) Final Settlement Day (FSD)	LTD: Usually 3 rd Monday FSD: Usually 3 rd Wednesday (T+2)	LTD*: Usually 3 rd Monday FSD*: Usually 3 rd Tuesday (T+1)



*LTD: Two Hong Kong Business Days prior to the third (3rd) Wednesday of the Contract Month
FSD: The first Hong Kong Business Day after the Last Trading Day

COMPARISON BETWEEN USD/CNH FUTURES AND PROPOSED NEW PAIRS

	Product	USD/CNH Currency Futures	CNH/USD Currency Futures
1	Quotation	RMB per 1 USD (e.g. RMB 6.6233 per USD)	USD per 10 RMB (e.g. USD 1.2888 per 10 RMB)
2	Trading and Margin Currency	RMB	USD
3	Contract size	USD 100,000	RMB 300,000
4	Settlement Method	Physically settled (USD vs RMB)	Cash-settled in USD
5	Last Trading Day (LTD) Final Settlement Day (FSD)	LTD: Usually 3 rd Monday FSD: Usually 3 rd Wednesday (T+2)	LTD*: Usually 3 rd Monday FSD*: Usually 3 rd Tuesday (T+1)



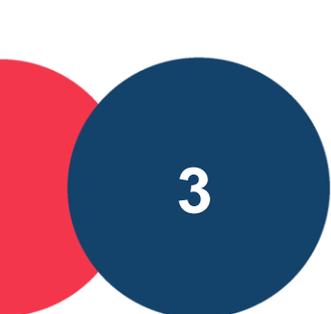
*LTD: Two Hong Kong Business Days prior to the third (3rd) Wednesday of the Contract Month
FSD: The first Hong Kong Business Day after the Last Trading Day

SIMULATED PRICE DATA – FOR REFERENCE ONLY

	USD/CNH Futures	EUR/CNH Futures	JPY/CNH Futures	AUD/CNH Futures	CNH/USD Futures
Spot Price	6.5659	7.3632	5.9580	4.7288	1.5230
Simulated Jun-16 Futures Price	6.5740	7.3748	5.9664	4.7297	1.5210
Simulated Sep-16 Futures Price	6.6161	7.4427	6.0214	4.7404	1.5121
Simulated Dec-16 Futures Price	6.6633	7.5171	6.0859	4.7584	1.5026

As of 13:00 on 19 May 2016





3

OPERATIONAL ARRANGEMENTS

TRADING ARRANGEMENTS

Maximum Order Size

- Max order size limit: 1,000 contracts
- EPs are required to submit their request to HKEX for setting up their own order size limits based on their business needs & risk management requirements

Block Trade

- Volume Threshold: 50 contracts (c. US\$2.5million)
- Permissible Price Range : $\pm 3\%$ of a reference price, which is obtained through prevailing market prices, or determined as the theoretical values based on prevailing underlying values (if necessary)

Error Trade Price Parameters

- Error trade parameter is 1% from notation price

AHFT Price Limit

- AHFT price limit is $\pm 3\%$ of the last traded price in the Day session
- For newly listed contract months, the reference price of the preceding contract month will apply

CLEARING AND RISK MANAGEMENT ARRANGEMENTS

Clearing Arrangements

- For EUR/CNH, JPY/CNH and AUD/CNH futures
 - CPs need to set up RMB account with Settlement Banks appointed by HKCC
 - Maintain relevant mandates as prescribed by HKCC
- For CNH/USD futures
 - CPs need to set up USD account with Settlement Banks appointed by HKCC
 - Maintain relevant mandates as prescribed by HKCC
- CPs have to ensure these bank accounts are in active status and ready for cash settlement
- Non-CPs should contact their GCPs to ascertain eligibility of clearing

Risk Management

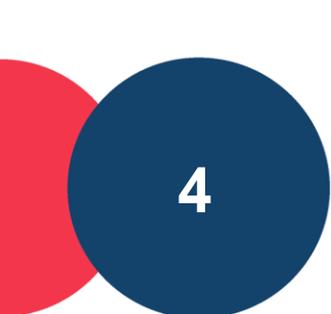
- Update of PC-SPAN Organization Master File announced
- Client initial margin around 2-4% of notional
 - EURCNH: RMB13,820
 - JPYCNH: RMB13,340
 - AUD/CNH: RMB13,210
 - CNH/USD: USD1,150
- Margin offset between existing USD/CNH and new CNH/USD futures (subject to regulatory approval)



INFORMATION VENDOR LIST

Mainland China Information Vendors	
1	AASTOCKS.com / Shanghai DZH
2	East Money Information
3	Hexin Flush Financial Information Network
4	Pobo Financial Information
5	Shanghai Qianlong Advanced Technology
6	Shanghai Wind Information
Hong Kong and International Information Vendors	
1	AAStocks
2	Activ Financial
3	AFE Solution
4	Bloomberg
5	CQG
6	DBPower
7	ETNet
8	Fidessa
9	Infocast
10	Interactive Data
11	Market Prizm
12	QPI
13	SIX Financial
14	Telequote
15	Tele-Trend
16	Thomson Reuters





4

HEDGING & TRADING APPLICATIONS

HOW TO USE ADDITIONAL RMB CURRENCY FUTURES

**Hedge for Own
Treasury Inventory
(e.g. EUR, JPY, AUD)**

**Add Value to
Multi-Currency
Portfolios**

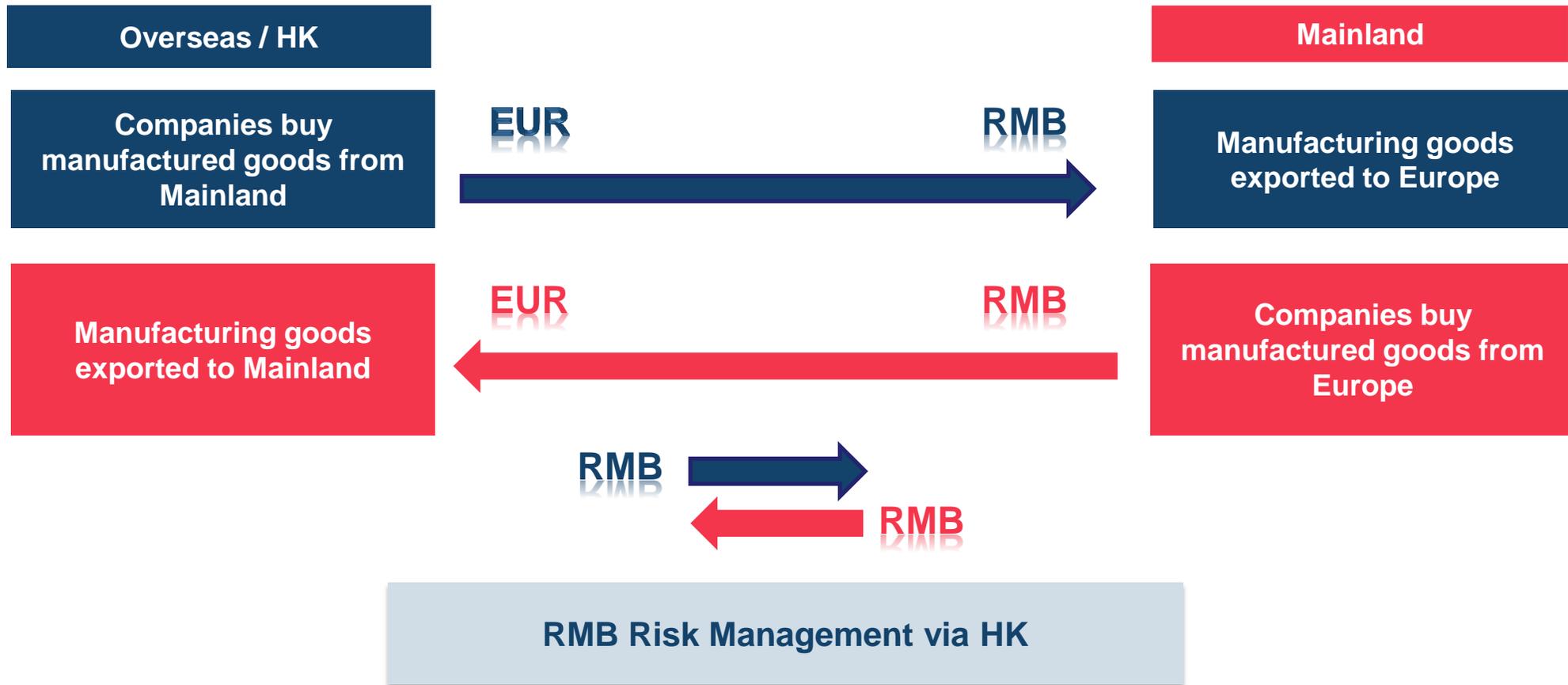
**Pair Trading and
Commodity Plays
(e.g. AUD)**

**Capture Policy
Changes (ECB/BOJ) &
Macro News Release**

**Correlation /
Covariance
Play between
RMB Pairs**

SIMPLE AND EFFICIENT RISK MANAGEMENT TOOL

Trade Finance and Cross-border Trade Settlement in e.g. EUR vs. RMB



HEDGING AND TRADING APPLICATIONS (1)

Against RMB Depreciation

Case Study

An European investor investing in Mainland A-shares
Anticipates RMB depreciation against EUR over the next 6 months

Scenario 1: No Hedging

Now

- Convert *EUR 10 mil* to RMB 71 mil @ 7.1000
- Buy mainland A-shares



6 months later

- 5% stock price increase and sell stocks to get RMB 74.6 mil
- RMB depreciates against EUR from @7.1 to @7.2
- Convert it back to *EUR 10.35mil* @ 7.2

P&L: Gain EUR 0.35mil

Scenario 2: Hedge via Long EUR/CNH Futures Positions

Now

- Convert *EUR 10 mil* to RMB 71 mil @ 7.1000
- Buy mainland A-shares



6 months later

- 5% stock price increase and sell stocks to get RMB 74.6 mil
- RMB depreciates against EUR from @7.1 to @7.2
- Convert it back to *EUR 10.35mil* @ 7.2

- Close out @ 7.2400 and get RMB 0.9 mil profit, equivalent to EUR 0.13mil @7.2

P&L: Gain EUR 0.48mil

Covering the loss in RMB depreciation and protect the gain in A-shares



Note: The case studies are hypothetical and the calculations exclude the transaction costs involved

HEDGING AND TRADING APPLICATIONS (2)

Against RMB Appreciation

Case Study

A Mainland investor buying an Australian property
Anticipates RMB appreciation against AUD over the next 12 months

Scenario 1: No Hedging

Now

- Convert **RMB3.84mil** to AUD 0.8mil @ 4.8000
- Buy a property of AUD 0.8mil



12 months later

- Sell property at increased value of AUD 1mil
- RMB appreciates against AUD from @4.8 to @4.7
- Convert it back to **RMB4.7mil** @ 4.7

P&L: Gain RMB0.86mil

Scenario 2: Hedge via *Short* AUD/CNH Futures Positions

Now

- Convert **RMB3.84mil** to AUD0.8mil @ 4.8000
- Buy a property of AUD 0.8mil
- Short 10 AUD/CNH Futures contracts @ 4.85



12 months later

- Sell property with increased value of AUD 1mil
- RMB appreciates against AUD from @4.8 to @4.7
- Convert it back to **RMB4.7mil** @ 4.7
- Close out @ 4.76 and get RMB72,000 profit

P&L: Gain RMB0.93mil

Effective hedging can enhance investment return



DISCLAIMER

TMA's Spot USD/CNY(HK) Fixing

https://www.tma.org.hk/en_market_info.aspx

The Fixing which serves as the benchmark for market exchange rate of USD against CNY(HK) at 11:00 a.m. Hong Kong time is determined by averaging the middle quotes after excluding the highest two quotes and lowest two quotes from the 18 Contributing Banks. The Spot USD/CNY(HK) Fixing is published at around 11:15 a.m. Hong Kong time each business day (excluding Saturdays). Thomson Reuters is the calculating agent for the fixing. Thomson Reuters RICs <CNHFIX=>; Thomson Reuters pages <CNHFIX>.

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Futures involve a high degree of risk. Losses from futures trading can exceed your initial margin funds and you may be required to pay additional margin funds on short notice. Failure to do so may result in your position being liquidated and you being liable for any resulting deficit. You must therefore understand the risks of trading in futures and should assess whether they are right for you. You are encouraged to consult a broker or financial advisers on your suitability for futures trading in light of your financial positions and investment objectives before trading.

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